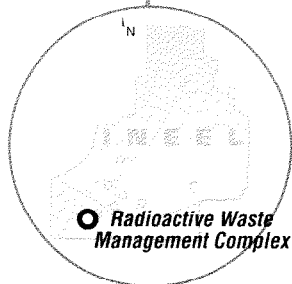


# Radioactive Waste Management Complex



**Established:** Late 1952

**Original Mission:** Solid, low-level radioactive waste disposal; burial of transuranic waste and hazardous substances, such as organic and inorganic chemicals (-1970); storage of transuranic waste on a pad above ground and disposal of other waste in 20 pits, 58 trenches and 21 soil vault rows (1970-present).

**Current Mission:** Interim storage of transuranic waste; shipment of stored transuranic waste to WIPP for permanent disposal.

**FFA/CO Designation:** Waste Area Group 7



## Waste Treatment, Storage and Disposal

### Transuranic waste shipments continue

The Radioactive Waste Management Complex expanded its operational and waste characterization efforts in 2000, instituting a two-crew, seven-day work week. The intensified effort was necessary because of the delay in the opening of the Waste Isolation Pilot Plant near Carlsbad, NM.

The INEEL completed 13 shipments of stored transuranic mixed debris waste to WIPP in 2000, for a total 103 m<sup>3</sup> (497 drums). As of February 2001, another 21 shipments were completed. A total of 3,100 m<sup>3</sup> of stored transuranic waste (15,000 drums) must be shipped to WIPP by Dec. 31, 2002 to meet a Settlement Agreement milestone.

Before the drums of mixed debris waste can be approved for shipment, their contents must be identified. The process, called characterization, is complicated because almost half the drums do not meet WIPP's requirements. For example, some drums contain too much liquid or banned materials, or they have excessively high radioactivity levels, which requires the waste to receive further treatment or analysis.

The INEEL expects to receive approval to ship stored solidified transuranic wastes, composed primarily of sludges, by April 2001.

Approximately 60 percent of DOE's current inventory of contact-handled transuranic-contaminated waste is stored at the Radioactive Waste Management Complex. The 1995 Settlement Agreement between DOE and the state of Idaho requires that all of INEEL's stored transuranic waste (currently about 64,700 m<sup>3</sup> of both contact- and remote-handled transuranic wastes) is shipped to WIPP for final disposal by 2018. The INEEL expects to make about 4,900 shipments – approximately 205,000 drum equivalents – of stored transuranic waste to the WIPP between now and the end of 2018.

## Footnote

**Transuranic waste** generally consists of protective clothing, equipment, soils and sludges that contain more than 100 nanocuries of radioactive elements, such as plutonium, americium, neptunium and californium. These wastes are called transuranic because they are heavier than uranium. Transuranic waste is divided into two categories, based on levels of radioactivity:

- **Contact-handled** – can be handled under controlled conditions without any shielding other than from the container itself. Most of the INEEL's stored contact-handled waste is destined for disposal at WIPP.
- **Remote-handled** – must be handled and transported in shielded casks because the surface dose rate is above 200 millirems per hour. Remote-handled waste shipments, anticipated to begin in late 2004 at the earliest, will use the newly-approved RH-72B cask. The cask, which resembles a giant steel barbell, weighs about 37,000 pounds when it is empty.

## Footnote

The **Waste Isolation Pilot Plant** was designed as a permanent disposal site for defense-generated transuranic waste left from the research and production of nuclear weapons. The facility is located in southeastern New Mexico, 26 miles east of Carlsbad. The facility's disposal areas are excavated in an ancient, stable salt formation 2,150 feet underground.

## 2000 Highlights

- Shipped 103 m<sup>3</sup> of stored transuranic waste to WIPP
- Reduced the volume of low-level waste in storage at the INEEL to less than 800 m<sup>3</sup>
- Treated 2,990 m<sup>3</sup> of low-level radioactive waste through compaction and sizing
- Disposed of 4,260 m<sup>3</sup> of low-level radioactive waste in the disposal pit
- Retrieved 15 drums of remote-handled transuranic waste
- Began technology treatability studies, which, if used, would permanently reduce the risk posed by buried waste
- Removed and treated 13,931 lbs of volatile organic compounds.

## 2001 Goals

- Ship 1,160 m<sup>3</sup> (1,282 m<sup>3</sup> cumulative to date) of stored transuranic waste to WIPP
- Dispose of 3,186 m<sup>3</sup> of low-level waste.

### **chnical solutions sought to speed up disposal process**

As one of the first DOE sites to send waste to WIPP, the INEEL is also one of the leaders in technology development for transuranic waste shipment. Because the INEEL estimates that 20–40 percent of its stored transuranic waste does not yet meet the WIPP waste acceptance criteria for disposal, the INEEL is aggressively developing solutions that include nondestructive assay and examination, repackaging and processing technologies.

One of the new technologies already in use is the EXPERT system. The system uses non-intrusive sensing and intelligent data processing to improve waste characterization and reduce some work efforts from a week to only a day.

Another new technology, MDAS, can identify and assay fissile materials (such as, plutonium-239 and uranium -233 and -235) in one measurement instead of the multiple steps now required.

Technologies and capabilities developed at the INEEL can be used across the DOE complex. For example, many technologies being developed for better managing remote-handled waste can be used in the future for spent nuclear fuel.

### **Low-level waste disposal exceeded goals**

Low-level wastes disposed of at the Radioactive Waste Management Complex included 4,260 m<sup>3</sup> of contact-handled low-level waste. Of that, 2,994 m<sup>3</sup> was reduced in volume before disposal. An additional 83.3 m<sup>3</sup> of remote-handled low-level waste was also disposed of.

### **Privatized treatment facility under construction**

Construction of the Advanced Mixed Waste Treatment Project facility began in 2000 and is currently ahead of schedule. The facility will repackage and treat the transuranic waste stored aboveground at the Radioactive Waste Management Complex and then ship it to WIPP for final disposal. Construction is expected to be complete in

December 2002 and operations will begin in March 2003.

More information can be found at [www.amwtp.com](http://www.amwtp.com).

## **Remediation**

### **Subsurface Disposal Area investigation continues**

The DOE, EPA and state of Idaho are investigating the risks posed by waste buried before 1970 at the 97-acre Subsurface Disposal Area. The area consists of 20 pits, 58 trenches and 21 soil vault rows. The results of the investigation will be used to identify and compare various remedial options, which include institutional controls; containment; in situ (in place) treatment; retrieval followed by treatment and disposal; or a combination of these approaches.

Unlike most landfills, the SDA has a comprehensive and detailed information database of waste quantities and disposal locations, and fairly detailed information about where and how the wastes were generated. The database also contains waste retrieval data from as far back as 1968.

This information is being verified with methods including probing, and magnetic and shallow surface soil vapor surveys. The data that is collected will be used to more exactly determine the nature and extent of the contamination, including the mass of volatile organic compounds remaining in the waste and the locations of specific waste streams.

Extensive groundwater and vadose zone monitoring are also underway to learn more about current and potential contaminant migration, such as the rates at which uranium and carbon-14 are being released. Information from monitoring also helps scientists understand how the nearby Big Lost River system influences contaminant migration.

### **Organic vapor removal continues**

Organic vapors from more than 1.08 million pounds of carbon tetrachloride, approximately 75 percent of the volatile organic compounds disposed of in the Subsurface Disposal Area, have migrated beneath the disposal area and into the aquifer.

# **Completing the steps**

## **Disposing of contact-handled transuranic mixed waste at WIPP**

### **Characterization**

- Identification of a waste container's contents must meet stringent regulatory requirements, requiring extensive and repeated testing, data collection, gas venting and data validation. The process may take as long as 9 months.

### **Packaging**

- Each transuranic waste drum is vented
- A maximum of 14 drums, weighing a maximum of 1,000 lbs each and totaling a maximum of 7,265 lbs, are loaded into each TRUPACT-II shipping container, the only container certified by the Nuclear Regulatory Commission for shipping contact-handled wastes
- A maximum of three TRUPACT-II containers with a total fissionable material limit of <7 curies/drum can be carried by each truck.

### **Notification Requirements**

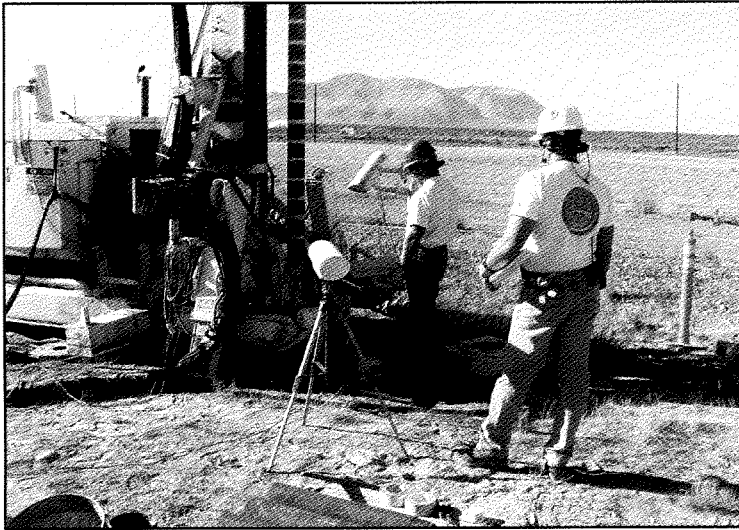
- Annual notifications by Jan. 31
- Mid-year notification updates
- 8-week shipment projections
- 7-day notice for TRANSCOM, the Transportation Tracking and Communications System (see below)
- A direct phone call 2 hours before crossing any state border.

### **Shipment**

- Two drivers are required
- Driver inspections are made every 2 hours or 100 miles
- Trucks required to use the Interstate Highway System unless alternate routes have been previously specified
- Satellites and other equipment track shipments (TRANSCOM system)
- Emergency responders must be ready. (DOE has trained more than 12,000 emergency response professionals in 12 states and 9 tribes. The training is supplemented with annual drills and exercises.)

### **Potential issues**

- Availability of trucks and TRUPACT-II containers
- Inventory availability that qualifies for transportation and disposal
- Weather and road conditions, poor weather forecasts
- Mechanical problems
- State-conducted radiological and mechanical inspections (more stringent than regulations)
- Incomplete loads ready for shipment
- Interstate will be closed to radioactive waste shipment due to 2002 Olympics



*Scientists install a probe to add to their information about the waste buried in the Subsurface Disposal Area.*

The vapors were released from deteriorating drums and boxes containing various degreasers and solvents. Volatile organic compounds are the greatest near-term risk to the aquifer.

A vapor vacuum extraction process has been used since 1996 to extract the vapors and destroy them with a thermal oxidation process. To date, the technology has destroyed more than 82,000 lbs of volatile organic compounds.

#### **Probing for information**

Since December 1999, probes have been used at the Subsurface Disposal Area to learn more about the

composition and condition of buried wastes and surrounding soils, and to support and validate the risk assessment, investigation and decision-making processes. The probing effort began at Pit 9 and then expanded to other portions of the disposal area.

The probe tubes are hollow 6-inch-diameter steel tubes that are drilled into the ground using sonic waves. The probe tubes extend through the waste to the underlying basalt at depths ranging from 10 to 27 feet. Geophysical instruments placed in the probe tubes measure radioactivity, moisture and chlorine.

Data gathered from the probes provides vertical waste and soil profile

information, including the depth of the waste layer, the point where the soil and basalt bedrock meet, and the apparent distribution of contaminants. Localized areas of plutonium contamination can also be identified and characterized using the probes. The new information has provided increased knowledge about the extent that water from rain and snow permeates the ground.

More than 150 additional probes will be installed in a second phase of data gathering. These probes will collect data from leachate, the liquid produced when water seeps through the contents of a landfill, picking up chemicals as it travels. The new data will help determine soil composition, chemistry, moisture and vapor content.

The matrix of boreholes also will provide clearer information about contaminant locations and will indicate potential gradients reflecting their movement.

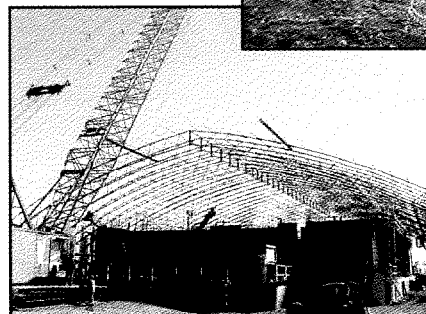
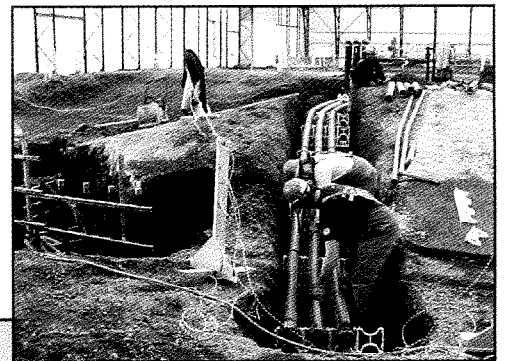
## **Private Contractor responsible for AMWTP Facility**

DOE awarded a contract for the Advanced Mixed Waste Treatment Project to BNFL Inc. in 1996. The company, based in Fairfax, Va., provides nuclear waste management services, including decommissioning, engineering, spent-fuel storage and nuclear materials handling.

Under the contract, BNFL Inc. is responsible for designing, constructing and operating a facility for treating approximately 65,000 m<sup>3</sup> of mixed transuranic and alpha low-level waste. The completed facility will be a two-story industrial structure that is centrally located within the 56-acre Transuranic Storage Area.

Original plans for the facility included an incinerator, which would have been used to destroy polychlorinated biphenyls (PCBs) and other organic compounds in the wastes so they would be acceptable for shipment to WIPP. The DOE agreed not to build the incinerator as part of a settlement reached with litigants in a lawsuit brought against the agency. Because most of the waste that will be treated at the facility will not require incineration, the DOE has concluded that its legal obligations to remove the waste under the Settlement Agreement will not be jeopardized.

More information on the AMWTP facility can be found at [www.amwtp.com](http://www.amwtp.com).



*A huge tent was erected over the site of the future AMWTP facility, allowing construction to continue through the winter. A 4100 ton crane was later used to remove the enclosure.*

# Naval Reactors Facility

## Waste Treatment, Storage and Disposal

During 2000, 16 shipments (or 1.5 MTHM) of spent nuclear fuel were received from other U.S. Naval Nuclear Propulsion Program activities. The spent fuel was inspected and transferred to the Idaho Nuclear Technology and Engineering Center for temporary storage.

Preparations are underway for the dry storage of spent nuclear fuel, including the Naval spent nuclear fuel currently stored at the Idaho Nuclear Technology and Engineering Center, at the Naval Reactors Facility. The fuel will eventually be transferred to an interim or final repository outside Idaho.

### Footnote

One **MTHM** (metric ton of heavy metal) is equal to 2,200 pounds of uranium.

## Remediation

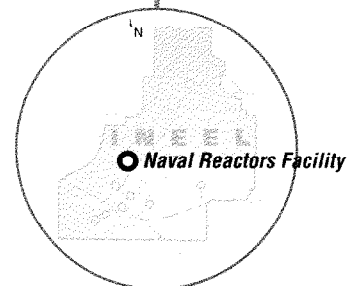
Remediation continues at nine release sites identified in the 1998 Record of Decision. The effort primarily includes excavating and consolidating soils contaminated with low levels of radionuclides.

### 2000 Highlights

- Received 16 shipments of Naval spent nuclear fuel for examination and interim storage
- Sent 33 shipments of naval spent nuclear fuel to the Idaho Nuclear Technology and Engineering Center
- Continued remediation actions on or ahead of schedule.

### 2001 Goals

- Receive 3 shipments of spent nuclear fuel from U.S. Navy for examination and interim storage
- Begin dry storage of naval spent nuclear fuel
- Continue remediation actions.



**Established:** 1949

**Operated by:** Bechtel Bettis, Inc. for DOE's Office of Naval Reactors

**Original Mission:** Naval Nuclear Propulsion Program engineering and materials testing; preparation of Naval spent nuclear fuel for recovery of fissile material; nuclear operator training.

**Current Mission:** Research, inspection and examination of naval spent nuclear fuel at the Expanded Core Facility; temporary storage of naval spent nuclear fuel and special case waste; preparation and examination of developmental materials including nuclear fuel from INEEL's Advanced Test Reactor.

**FFA/CO Designation:** Waste Area Group 8

# Argonne National Laboratory–West

## Waste Treatment, Storage and Disposal

### Technology selected; EBR-II spent nuclear fuel treatment begins

As directed by a Record of Decision signed in 2000, Argonne National Laboratory–West began treating the sodium-bonded spent nuclear fuel from their Experimental Breeder Reactor-II. Spent nuclear fuel from the reactor has been stored at Argonne National Laboratory–West since the reactor was shut down in 1994. A small amount of sodium-bonded spent nuclear fuel from some '60s-era programs is stored at the Idaho Nuclear Technology and Engineering Center.

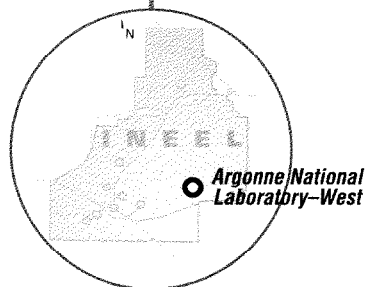
The treatment technology, in development for the last decade, is an

electrometallurgical process that reduces overall volume and produces more stable waste forms. The process removes the reactive metal sodium component from the spent nuclear fuel and converts the long-lived transuranic elements and fission products into ceramic and metallic waste forms.

The technology also has potential for treating other forms of sodium-bonded spent nuclear fuel, such as the

### Footnote

*Sodium-bonded spent nuclear fuel is distinguished from other reactor spent nuclear fuel by the presence of metallic sodium, (a highly reactive material); metallic uranium and plutonium (which are also potentially reactive). This fuel may also contain highly enriched uranium.*



**Established:** 1957

**Operated by:** University of Chicago for DOE

**Original Mission:** Tested nuclear reactors and reactor safety systems, including the Experimental Breeder Reactor-II (1964-1994).

**Current Mission:** Stabilization, management and storage of spent nuclear fuel; storage of transuranic waste; large-scale advanced reactor development.

**FFA/CO Designation:** Waste Area Group 9

## 2000 Highlights

- Began electrometallurgical treatment of EBR-II sodium-bonded spent nuclear fuel (an FFA/CO milestone)
- Completed two-year phytoremediation field demonstrations
- Completed excavation and disposal of contaminated soil at portions of two sites where phytoremediation was determined to be impractical
- Provided visual examination and repackaging services for the effort to ship stored transuranic waste out of Idaho to WIPP

## 2001 Goals

- Continue electrometallurgical treatment of EBR-II sodium-bonded spent nuclear fuel
- Complete all Site Treatment Plan milestones for waste backlog
- Continue supporting INEEL's transuranic waste program.

3.4 metric tons of Fermi-I reactor fuel currently stored at the Idaho Nuclear Technology and Engineering Center.

### ***ANL-W helps move transuranic waste***

Argonne National Laboratory–West supported the INEEL's transuranic waste program with visual examination and repackaging services. Both steps are a necessary part of preparing transuranic waste for shipment out of Idaho.

## **Remediation**

### ***Two-year phytoremediation field studies complete***

Phytoremediation, a remediation technique that uses plants to extract contaminants from the soil, was used for the second year at five contaminated soil sites.

*Kochia scoparia* plants were again

grown in a half-acre area of soil contaminated with cesium-137. The cesium-extracting plants were harvested and analyzed in the late 2000. As with the first year's results, the analysis of the plant matter shows that the six-year remediation plan for the contaminated soil sites is still on track. The harvested plant matter has been packaged and will be treated and disposed of at an off-site disposal facility.

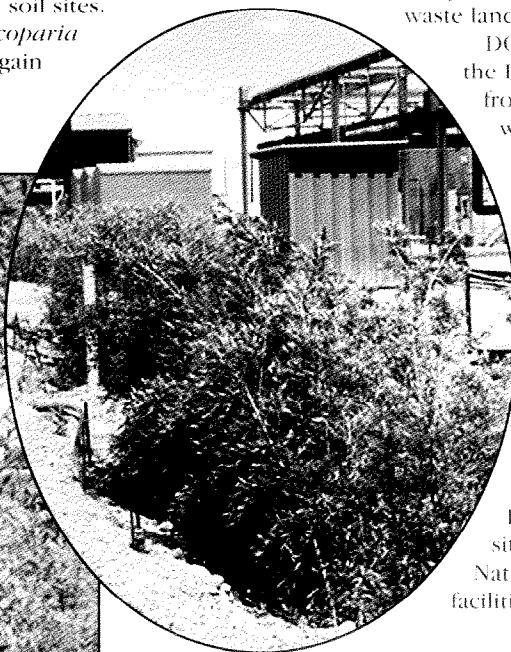
In another study, willows were grown in three industrial waste ditches that have soil contaminated with chromium, mercury and selenium. The willows extract these three metal contaminants from the soil, concentrating them in their roots where birds and browsing animals cannot ingest them.

The willows were harvested in late 2000 after a two-year growing cycle. Analysis of the plant matter shows that the willows extracted significant quantities of the three metal contaminants. The non-radioactive plant matter will be disposed of at an INEEL industrial waste landfill.

DOE, the state of Idaho and the EPA are reviewing the data from the field studies. They will make a decision by early March 2001 whether to continue using phytoremediation at some or all of the five contaminated soil sites.

### ***2000 range fires***

In Summer 2000, a range fire burned approximately 11 square miles of land to the west of Argonne National Laboratory–West. No waste sites or other Argonne National Laboratory – West facilities were affected by the fire.



"Prairie Cascade" willows extract chromium, selenium, silver and mercury from contaminated soil at three sites. One of the metal-extracting willow trees is uprooted during harvest in September 2000.

# Areas Outside Facility Boundaries and Snake River Plain Aquifer

## Remediation

### INEEL's surface area is investigated

A comprehensive investigation of contaminated areas of the land surface across the INEEL was completed in 2000. The investigation encompassed impacts to air, surface soils and surface water from the INEEL's activities. The investigation includes all of the areas outside facility boundaries as well as the Experimental Breeder Reactor-I/Boiling Water Reactor Experiment. (Groundwater concerns, specifically the contamination of the Eastern Snake River Plain Aquifer that underlies the INEEL, will be addressed separately.)

### Shoshone-Bannock Tribes offer input

The INEEL contracted directly with the Shoshone-Bannock Tribes of the Fort Hall Indian Reservation for their input to the comprehensive investigation. The Tribes' members traditionally occupied the INEEL area and continue to use it for many cultural and economic purposes. The Tribes summarized what is important to them in defining and remediating risks to human and environmental health. The report suggests that corrective action be taken to correct changes, disturbances, and perceived voids in the native landscape ecology, thereby restoring balance to the universe.

### Risk to INEEL's ecology studied

Site-wide ecological risk assessment activities were completed as part of the comprehensive investigation. The assessment integrated the results of the individual ecological risk assessments that were conducted previously with additional data collected for this effort. The results of the assessment will be included in a Proposed Plan, expected to be issued in 2001.

Animal and plant samples from the Boiling Water Reactor Experiment-I (BORAX-I) area were studied to determine whether an engineered barrier is keeping buried contamination from coming into contact with the environment.

The samples that were gathered either contained no contamination or had contamination levels similar to levels in plants and animals outside the INEEL's boundaries. Future studies may include using methods to examine DNA in animals living at the INEEL, looking for signs of genetic damage that might indicate exposure to contaminants.



### Groundwater monitoring continues

Additional monitoring wells were drilled to expand scientific understanding of the geologic structures beneath the INEEL and contaminant movement.

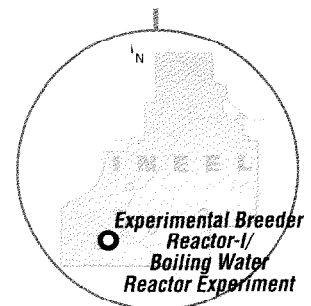


**Established:** 1940s

**Original Mission:** Naval proving ground and gunnery range; National Reactor Testing Station.

**Current Mission:** Buffer area to protect national security interests and the public.

**FFA/CO Designation:** Waste Area Group 10



**Established:** 1940s

**Original Mission:** Nuclear reactor research.

**Current Mission:** National Historic Landmark for Experimental Breeder Reactor-I, the first reactor to produce usable amounts of electricity.

**FFA/CO Designation:** Waste Area Group 6

## Shoshone-Bannock Tribes Share Holistic View

The INEEL lies within the original aboriginal territories of the Shoshone-Bannock Tribes of the Fort Hall reservation. A wide variety of natural and cultural resources and areas at the INEEL directly reflect the Tribes' cultural heritage. These resources are of great importance in the maintenance of tribal spiritual and cultural values and activities, oral tradition and history, mental and economic well-being and overall quality of life.

The DOE has long acknowledged its commitment to protect not only the health and safety of the Tribes but also the environment and cultural resources that are essential to their subsistence and culture.

In the holistic worldview of the Shoshone-Bannock Tribes, land, air, water, plants, animals and humans are all interconnected. Changes and losses in the landscape are seen as leading to an imbalance in nature that affects all things.

## 2000 Highlights

- Contracted with Shoshone-Bannock Tribes for assessment of Native American concerns.

## 2001 Goals

- Complete investigation of surface contamination areas
- Complete site-wide ecological risk assessment
- Issue a Proposed Plan and complete a Record of Decision for the comprehensive investigation of site-wide ecological risk, miscellaneous surface sites and the Experimental Breeder Reactor-I/Boiling Water Reactor Experiment area (an FFA/CO milestone).

# Cleanup Overview

- ☒ Phase completed  
☐ Phase in progress

	Investigation	Public Comment and Decision	Remedial Design and Decision	Ongoing Maintenance and Monitoring	Comments
<b>Test Area North (WAG 1)</b>					
Groundwater Interim Action	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	N/A	Action completed
Groundwater Final Action	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Record of Decision pending
Comprehensive	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		Cleanup action in progress
<b>Test Reactor Area (WAG 2)</b>					
Warm Waste Pond	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Action completed; routine monitoring ongoing
Perched Water	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Action completed; routine monitoring ongoing
Comprehensive	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Action completed; routine monitoring ongoing
<b>Idaho Nuclear Technology and Engineering Center (WAG 3)</b>					
Comprehensive	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		Cleanup design in progress
Tank Farm	<input type="radio"/>				Interim action in progress
<b>Central Facilities Area (WAG 4)</b>					
Motor Pool Pond	<input checked="" type="radio"/>	<input checked="" type="radio"/>	N/A	N/A	Investigation determined no action necessary
Landfills	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Action completed; routine monitoring ongoing
Comprehensive	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		Cleanup action in progress
<b>Waste Reduction Operations Complex/ Power Burst Facility (WAG 5)</b>					
PBF Evaporation Pond	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Action completed; routine monitoring ongoing
ARA Chemical Evaporation Pond	<input checked="" type="radio"/>	<input checked="" type="radio"/>	N/A	N/A	Investigation determined no action necessary
Stationary Low-Power Reactor-I/ Boiling Water Reactor Experiment	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Action completed; routine monitoring ongoing
Comprehensive	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		Cleanup action in progress
<b>Experimental Breeder Reactor-I/ Boiling Water Reactor Experiment (WAG 6)</b>	Included in Waste Area Group 10 Areas Outside Facility Boundaries investigation				
<b>Radioactive Waste Management Complex (WAG 7)</b>					
Pit 9	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		Design in progress
Pad A	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Action completed; routine monitoring ongoing
Vadose Zone	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		Action in progress
Comprehensive	<input type="radio"/>				Investigation in progress
<b>Naval Reactors Facility (WAG 8)</b>					
Industrial Waste Ditch	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Action completed; routine monitoring ongoing
Comprehensive	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		Cleanup in progress
<b>Argonne National Laboratory—West (WAG 9)</b>					
Comprehensive	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		Cleanup in progress
<b>Snake River Plain Aquifer and Miscellaneous Sites (WAG 10)</b>					
Comprehensive (Areas Outside Facility Boundaries, EBR-I/Boiling Water Reactor Experiment)	<input type="radio"/>				Investigation nearing completion
Snake River Plain Aquifer	<input type="radio"/>				Investigation in progress



## The Future

### *Institutional Plan defines vision*

The INEEL Institutional Plan explains the laboratory's plans for the next five years. The goal is to increase research and development for the nation's environmental, energy, security and science needs while continuing to remediate contaminated areas of the environment. As site remediation nears completion, the laboratory's primary mission is expected to shift to research and development as a significant national applied engineering resource. Continuing collaboration with universities and other national laboratories and completing a new Subsurface Geoscience Laboratory by 2006 will be extremely important.

To meet the laboratory's goal, two key challenges must be solved. The INEEL must close the gap between DOE's budget for environmental remediation and the costs of meeting regulatory requirements. In addition, the INEEL must undergo a successful revitalization effort, ensuring appropriate investments are made in facilities, equipment and people.

### *Meeting Budget Challenges*

Each fiscal year the INEEL defines a budget necessary to meet all its immediate regulatory and remediation

requirements. The budget also includes the amounts necessary to reach its future goals and milestones.

The INEEL submits the budget to DOE Headquarters in Washington D.C., where it is balanced with budget requests from other DOE facilities and programs. The DOE then submits its overall budget request to the Office of Management and Budget. The Office of Management and Budget balances the DOE's request with other government agencies and programs. The President's priorities are then factored into the budget and the budget is submitted to Congress. The overall budget requests must be approved by both the House and the Senate and signed by the President. In other words, the INEEL's budget is determined by vote.

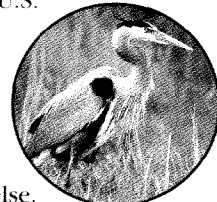
The INEEL's projected budget requirements for meeting its remediation and regulatory obligations requires increased expenditures. An increased budget, however, is not likely, either now or in the future. As a result, the INEEL will be required to be even more innovative to meet all its remediation goals and regulatory requirements with increasingly limited resources.

The complete text of the INEEL's Institutional Plan is on the web at [www.inel.gov/documents/ip2001/overview.html](http://www.inel.gov/documents/ip2001/overview.html).

## Site-wide Investigation included Sagebrush Steppe Ecosystem Reserve

The INEEL's 890 square miles contains the 74,000 acre Sagebrush Steppe Ecosystem Reserve, the largest expanse of undisturbed, native sagebrush-steppe habitat anywhere in the U.S.

More than 270 animal species and 400 plant species are found at the INEEL – some found nowhere else.



An analysis is underway of potential cumulative risk to the reserve and the remainder of the INEEL's environment. The results of the analysis will be included in a Proposed Plan for site-wide ecological risk, miscellaneous surface sites and the Experimental Breeder Reactor-I/Boiling Water Reactor Experiment area to be issued in 2001.

More information can be found on the INEEL Environmental Surveillance, Education and Research Program website at [www.stoller-eser.com](http://www.stoller-eser.com).

<b>Get Involved (public involvement)</b>	<b><a href="http://www.inel.gov/get-involved">www.inel.gov/get-involved</a></b>
<b>INEEL</b>	<b><a href="http://www.inel.gov">www.inel.gov</a></b>
<b>INEEL Publications</b>	<b><a href="http://www.inel.gov/publications">www.inel.gov/publications</a></b>
<b>U.S. DOE</b>	<b><a href="http://www.energy.gov">www.energy.gov</a></b>
<b>DOE - Idaho</b>	<b><a href="http://www.id.doe.gov/doeid">www.id.doe.gov/doeid</a></b>
<b>Department of Environmental Quality (DEQ) - Idaho</b>	<b><a href="http://www2.state.id.us/deq">www2.state.id.us/deq</a></b>
<b>State of Idaho</b>	<b><a href="http://www.state.id.us">www.state.id.us</a></b>
<b>WIPP (Waste Isolation Pilot Plant)</b>	<b><a href="http://www.wipp.carlsbad.nm.us">www.wipp.carlsbad.nm.us</a></b>
<b>Argonne National Laboratory-West</b>	<b><a href="http://www.anlw.anl.gov">www.anlw.anl.gov</a></b>
<b>Advanced Mixed Waste Treatment Project (AMWTP)</b>	<b><a href="http://www.amwtp.com">www.amwtp.com</a></b>
<b>BNFL Inc.</b>	<b><a href="http://www.bnflinc.com">www.bnflinc.com</a></b>
<b>U.S. Environmental Protection Agency (EPA)</b>	<b><a href="http://www.epa.gov">www.epa.gov</a></b>
- Current drinking water standards	<b><a href="http://www.epa.gov/safewater/mcl.html">www.epa.gov/safewater/mcl.html</a></b>
- Drinking water contaminants	<b><a href="http://www.epa.gov/OGWDW/hfacts.html">www.epa.gov/OGWDW/hfacts.html</a></b>
- Contaminant Descriptions	<b><a href="http://www.epa.gov/enviro/html/emci/chemref/index.html">www.epa.gov/enviro/html/emci/chemref/index.html</a></b>
<b>Periodic table</b>	<b><a href="http://www.webelements.com">www.webelements.com</a></b>
<b>Federal information database</b>	<b><a href="http://www.gpo.ucop.edu">www.gpo.ucop.edu</a></b>
<b>Public documents</b>	<b><a href="http://www.inel.gov/publicdocuments">www.inel.gov/publicdocuments</a></b>
<b>INEEL Technical Library/Information Center</b>	<b><a href="http://www.inel.gov/resources/library/techlib.htm">www.inel.gov/resources/library/techlib.htm</a></b>

INEEL Administrative Record is available at the following locations:

INEEL Technical Library	Albertsons Library	University of Idaho
DOE Public Reading Room	Boise State University	Campus Library
1776 Science Center Drive	1910 University Drive	434 2nd Street
Idaho Falls, ID 83415	Boise, ID 83725	Moscow, ID 83843
(208) 526-1185	(208) 385-1621	(208) 885-6344

Links/  
Resources





The 2001 *Progress* report provides the public with an overview of INEEL waste storage, treatment, and disposal; remediation; and public involvement activities. The report is an annual supplement to the DOE's *INEEL Reporter*, which is produced bimonthly by the INEEL Environmental Management Program.

## For More Information about the INEEL

INEEL Community Relations Office - Idaho Falls  
Environmental Management Program  
P.O. Box 1625  
Idaho Falls, ID 83415-3911  
(800) 708-2680

INEEL Regional Office - Boise  
800 Park Boulevard, Suite 790  
Boise, ID 83712  
(208) 334-9572

INEEL Regional Office - Jackson  
310A East Pearl Avenue  
Jackson, WY 83703  
(307) 732-2990

Call the INEEL toll-free number at (800) 708-2680  
for information about:

- specific documents
- scheduling a speaker or briefing
- public meetings or comment periods, or
- tours.

or contact Stacey Francis of the Community Relations  
program at (208) 526-0075 or at [syf@inel.gov](mailto:syf@inel.gov).



Environmental Management Program  
P.O. Box 1625  
Idaho Falls, ID 83415-3911

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